“I googled it...”: what is recommended online for the management of vulvovaginal candidiasis?

J Shaw, O McQuillan

The Hathersage Integrated Contraception, Sexual Health and HIV Service, Central Manchester University Hospitals NHS Foundation Trust, UK
Contact email: jonathan.shaw2@cmft.nhs.uk

Background

Recently our centre encountered women reporting self-treatment of candidiasis with intravaginal application of foodstuffs including garlic, vinegar and natural yoghurt. All patients had a unifying factor of reporting “googling” their therapy.

Objectives

We wanted to establish which candidiasis management strategies female patients are most likely to encounter when searching via Google.

Methods

Search history data was collated from Google Trends. Reviewing historic trends [since 2011] the term “thrush” has been used 4 times more frequently in UK Google searches than “candidiasis” or “vaginal discharge”

We therefore identified the ten most popular search terms related to “thrush” in the UK between 15/03/15-06/03/16. Results related to oral candidiasis, paediatric candidal disease, and candidiasis in men were excluded (shaded grey in Table 1).

The remaining terms, along with term “thrush”, were then assessed totalling 11 Google search terms. All websites (“links”) which featured on the first results page for each search term were selected to review their recommended therapies.

Data suggests the vast majority of Google users (>90%) select their final website destination from this first results page (containing the top-10 results plus advertisements)¹.

Results

Terms can be ranked in Google Trends by their search popularity (Table 1). The top search terms we identified were ranked against the baseline term “thrush” which has the maximum value of 100:

Search Term	Links on First Page	Google Trends Rank
Thrush	11	100
thrush symptoms	11	100
thrush treatment	11	80
mouth thrush	excluded	55
thrush men	excluded	50
thrush cream	11	45
symptoms of thrush	11	40
thrush in mouth	excluded	35
thrush causes	10	30
thrush in men	excluded	30
thrush infection	10	30
thrush baby	excluded	30
what is thrush	10	30
canesten	11	30
thrush pregnancy	10	30
thrush discharge	10	25
TOTAL	116	N/A

Table 1: Links accessed and Search Term Rank

In total 116 links were reviewed on the first results page for all search terms, 97 (83.6%) of these links discussed vulvovaginal candidiasis in women. 96/97 (99%) recommended imidazole therapy first line, with all reassuringly advising against oral therapy in pregnancy.

Patients were recommended to seek treatment via a pharmacy (72, 74.2%) or their GP (54, 55.7%) rather than attending a genitourinary service (12, 12.2%).

The unfounded recommendation for the vaginal application (PV) of natural yoghurt for symptomatic relief was frequent (40, 41.2%), more than the BASHH-recommended use of emollients or soap substitutes (27, 27.8 %)². Unfounded treatments including vinegar PV (8, 8.2%), the treatment of sexual partners (8, 8.2%), and bicarbonate of soda PV (6, 6.3%) were encountered (Figure 1).

Figure 1: Candidiasis management methods recommended

Conclusions

Reassuringly the NHS choices website was the top returned site for 9/11 terms searched. However the majority of searches also returned a paid advertisement by Canesten at the top of the Google search page i.e. the first result seen by patients.

Sensible evidence-based advice is frequently available online for vulvovaginal candidiasis, but NHS-associated pages are made less prominent by the higher placement of paid advertising (Figure 2).

A number of poorly evidenced therapies are encouraged by a variety of websites. This information should be discussed and appropriately challenged during routine management of vulvovaginal candidiasis in sexual health clinics.

Figure 2: Example Google Results page for search “thrush treatment”

Paid Canesten Ad

NHS Choices Link

References

1. D Loiz: How many clicks does each SERP get? – Google Organic Click-Through Rate Study 2014. Available online at: <http://www.advancedwebranking.com/blog/google-organic-click-through-rates-2014/>
2. Clinical Effectiveness Group - British Association of Sexual Health and HIV: United Kingdom National Guideline on the Management of Vulvovaginal Candidiasis (2007). Available online at: <http://www.bashh.org/documents/1798.pdf>

Data Source

We would like to acknowledge the support we received from Google in generating this dataset, via Google Trends (www.google.com/trends)